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ISLE OF WIGHT PC USER GROUP



OT KEY

SPRING 2012



















Ben Martens







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The Isle of Wight Personal computer User Group

We welcome all owners and users of IBM compatible Personal Computers.

We are a group which seeks to exchange ideas and new information.

Membership is £12 per annum

Our meetings are held on the first Wednesday of each month at
The Riverside Centre">The Riverside Centre, Newport from 7.30 to 9.30 pm
Visitors are welcome.

A charge of £2 is made per meeting, which includes tea or coffee during the break.

If you would like to know more about us, you are most welcome to come along to one of our meetings, or you can contact one of our Committee Members listed on page 3.

The Club Website address is **www.iwpcug.org**We also have an e-group discussion area on
Yahoo groups: **iwpcusers@vahoogroups.com.**



<u>FUTURE MEETINGS</u>			
<u>Date</u>	Subject	<u>Speaker</u>	
April 4	The Footprint Trust	Ray Harrington-Vail	
May 2	Mini Talks	Steve Sutters / Buzz Austin	
June 6	Island Eye revisited	Sean Colson (PC Consultants)	
July 4	Trading Standards	Susan Hughes	
Aug 1	Summer BBQ		
Sept 5	Migrating to a Mac	Carl Griffiths (Just PC's)	

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman: David Groom

Treasurer: Phil Rogers

Secretary: Susanne Bone

Membership & Database Secretary: Ray Boote

Committee Member: Roger Skidmore

Committee Member: Steve Sutters

Committee Member: Soren Johanson

HotKey Editor: Bob Groom

Contact details removed prior to publishing on the internet

Suggestions for new events, topics or speakers for talks are always welcome.

Please contact any committee member with your ideas.

If necessary we may be able to find a speaker for your subject.

Chairmans Report

As you can see from page 2, Roger has done a good job in ensuring we have speakers for much of the year.

The AGM was held in February, and the full minutes and club accounts are on the web site for you to view, however a few important decisions were made which I shall summarise below.

The photo competition was not as popular as we had hoped, receiving on average only 3 entries each quarter (and these tended to be from the same people). It was decided not to continue with this in future.

At last years AGM the decision was taken to raise the annual membership fee to 12, however it has become apparent that on its own this would not be enough to equate our annual income with our annual expenditure. The committee had considered a number of options, including recommending a further increase in membership fees, and paring down costs as much as we could. One thing was apparent however, our meeting receipts were 223, but costs of our meetings were greater than 339. The committee recommended therefore to raise the charge for attending meetings from 1 to 2. This is the first increase in meeting fees in a very long time. This proposal was agreed by the members.

Some members did point out that we could achieve considerable savings if we stopped the production of both the paper version of HotKey, and the cover disk. The paper version of HotKey could be replaced by a PDF version downloaded from the web site, and the CD could be replaced by links to where the various programs could be downloaded. In many ways this is an excellent idea, we are a computer club, and so should be embracing new technologies and the internet as much as possible, so why continue with producing physical editions of things? However many members may prefer to stick with the current formats.

After some discussion I therefore suggested that I write to all members asking in which format they would like to receive HotKey & the CD in the future, and that letter is included with this edition of HotKey.

The final, and perhaps most important point is **we need new members.** An increase in membership will increase the pool of available article writers for HotKey, increase the potential number of speakers for our meetings, increase participation in the Egroup, and have a beneficial impact on our funds. Please do see if any of your friends might be interested in joining us, and if you have anywhere you could display an advertising poster for the club, these are available for download from the documents section of the web site.

Superspeed USB3.0

I'm sure that we are all familiar with the USB (Universal Serial Bus) ports on our computers. We use them for connecting all kinds of devices including printers, external drives, cameras and even novelty items found in those gadget catalogues. Unless you have a very old PC then what we are using at the moment is USB2.0 which has been around since 2002. From 1996 when the bus was created we had simple USB1.1 which ran at 12Mbps and was quite slow. Certainly no good for large amounts of data.

I have recently built a new desktop machine for myself and the motherboard that I chose had the usual ports including numerous USB2.0 sockets. In addition, it also had a couple of USB3.0 ports and I wondered if these would be of any use. I decide to look into what USB3.0 was all about and why it appears that there are not many devices on the market that make use of it.

Firstly why would you want to even look at USB3.0? The reason is the increase in transfer speed. In theory the transfer speed is 4.8Gbit/s, the actual being around 3.2Gbit/s (400MB/s). The theoretical USB2.0 speed is 480Mbit/s (60MB/s) with the actual speed being around 25 – 30 MB/s for write transfers and 30 – 42 MB/s for read transfers. This equates to a tenfold improvement in theory, but in practice is more like 3-10 times. What does all this relate to in the real world? Well for example, with USB 3.0 you could transfer a 10 GB file from your computer to an external drive in approximately 25 seconds. With USB 2.0 this would take more than five minutes. USB3.0 external drives would be able to operate at their full transfer speed. Solid State Drives with their transfer rate of typically 100-500MB/s will be able to operate at near their full speed.

Another advantage of USB3.0 over earlier versions is that it can communicate with the connected device in full duplex mode. Therefore in the case of a media device for example, it could record and playback at the same time. It also supplies 80% more power over USB2.0 so that devices being charged will do so more quickly.

Physically, the most obvious difference of the USB3.0 connector is that it is blue instead of black, so it is easy to identify. Closer inspection reveals that it has an extra layer of 5 pins to accommodate the additional data lines. Originally there were 4 wires on the interface (power,ground and 2 data lines).

It now has an additional 2 pairs of pins for the high speed data plus an additional ground line. The design is clever because it enables compatibility with existing USB plugs so that you can connect your old USB2.0 and USB1.1 devices to the USB3.0 ports, though of course they will run at the slower speed. You cannot however plug a USB3.0 connector into an old USB socket

With all these super advances why hasn't the take-up of USB3.0 been much faster, after all the standard was created some 3 years ago with the first devices commercially available some 2 years ago? This is where big business comes into it along with rival interfaces.

The USB interface was created by a group of seven companies including Microsoft and Intel but since then other interfaces have made an appearance.

A similar interface is Firewire (IEEE1394) which was created by Apple. Firewire 400 runs slightly slower than USB2.0 at 400Mbps. Firewire 800 is faster than USB2.0 but nowhere near the speed of USB3.0. It uses have been mostly limited to linking audio/visual and specialist professional devices to a PC.

Another interface is e-SATA with a transfer speed of either 3Gbit/s or 6Gbit/s. It is intended to connect external hard drives but is not a general interface in the same way as USB.

The biggest rival interface is Thunderbolt (previously known as Light Peak). As this has been created by Intel with collaboration from Apple I think that this is why neither company has pushed USB3.0. Intel would get all the royalties from Thunderbolt but would have to share them with the other companies if using USB3.0. Thunderbolt was originally going to be a 100Gb/s fibre interface but is now a 10Gb/s copper cable interface, still much fast than USB3.0. It has the advantage of powering multiple monitors and offers vast data transfer invaluable to video production. Industry wide this is done mostly on MAC's hence the push to implement it mainly on Apple devices. In practice, uptake of Thunderbolt has been slow as it is more expensive to implement and devices would cost more.

At last we now see signs that Intel are pushing USB3.0 more than in the past. At present the interface has no native support within Intel chipsets, the controllers on the motherboard being separate chips. This in itself has caused problems with older chipsets where the USB3.0 controller has leached

bandwidth from the PCI-Express interface which limits the lanes available to graphic cards. You can buy expansion cards to add USB3.0 to existing machines but as these use a PCI Express 1 lane it may affect your system if you have more than one graphics card eg SLI. From around mid 2012 these problems should be solved when USB3.0 will be integrated into the Intel Ivy Bridge chipset. AMD are ahead of Intel here and have already built it into their Fusion Controller Hub (Southbridge) introduced in 2011.

As for software support, drivers are available for Windows 7 but it is not officially supported on XP. From Windows 8 support will be built in. Linux also supports USB3.0 and has done for some time.

One thing that may push up the usage of USB3.0 is in the case of smartphones which should be appearing towards the end of 2012 with a micro connector based on this interface. It won't run at the full speed but will be considerably faster than a USB2.0 interface. The increased power available will be a big bonus in charging these devices. Other USB3.0 devices available are flash drives (Maplin has some), also optical drives, video capture devices and full-HD webcams enabling HD 1080p at standard frame rates.

If you are thinking of a new PC or laptop I think it would be worth checking if it has USB3.0 ports as it looks like it is starting to take off at last.

Keith Burberry

Windows 8

The front cover picture shows the "start screen" of Windows 8. We had a brief demonstration of an early preview of this operating system in November 2011. Last month Microsoft released a more developed preview, and hopefully we will get a chance to look at this at one of our future meetings.

Photo Competition

Congratulations to David Broughton, this quarters winner of the photo competition. His winning photo is on the back cover. As reported in my Chairman's Report on page 4 this was the last photo competition the club will hold

To upgrade or not to upgrade that is the question

When I put my desktop media centre PC together, and DDR2 was then the fastest ram, I had a warm glow inside thinking this was about the fastest, quietest, and most energy efficient PC one could buy. Of course nothing changes faster than in the world of computers with improvements in speed, capacity and efficiency of many types of PC components. Now for the same amount of money I spent on the PC I built from bits (about £700) I could buy a fanless PC which would be silent apart from the noise of the hard drive and CD drive, slightly faster and use slightly less electricity.

As desirable as such a PC would be, I can think of much better ways of spending £700. I cannot see there being a big difference in performance. Also I would have to include the time spent researching the best components and puting the PC together! Let us not forget a big advantage of old motherboards which is legacy support. Here is a list of connections my present motherboard supports that new ones don't usually support.

IDE connections (for older hard drives and CD drives)
Firewire (common on mini DV camcorders)
Parallel port (common on older printers)
Floppy disk connections

I do like getting the most out of printers etc. So why not make do and mend and stop some rubbish going to land fill sites if old kit is meeting the users requirements?

Because my PC works so well and does everything I need I could not justify a whole new PC or even a major upgrade of motherboard, memory and CPU but when I saw a 3Ghz AMD 250e CPU for £35 on Ebay that uses the same power as my 2.5Ghz 4850e CPU I could not let that one go. When I put it in the PC one of the memory sticks stopped working. Because it was more than 4 years old the seller Ebuyer could not replace it but the maker Crucial agreed to swap the two sticks for some even faster ram FREE! Stunning customer service! So I also had a memory upgrade from 800 MHz to 1066 MHz. The PC is now faster than ever (35secs from the power button being pushed to the

hour glass disappearing). As I sold the old CPU for £20 the total cost of the upgrade was £20 (which included £5 for sending the old RAM back). That's what I call an excellent value for money upgrade.

Now for an alternative perspective on legacy support. A piece by Lars-Göran Nilsson on SemiAccurate about how Intel's P67, H67 and H61 chipsets will lack native PCI support brings to my mind the need to get rid of a lot of the legacy support on motherboards altogether.

It annoys me how motherboards, even high end parts, come with support for floppy drives and Parallel ATA hard drives, and some even come equipped with ... wait for it ... modems! On top of that, boards still come with ribbon cables for PATA and floppy drives, which means that a regular system builder like me ends up hip-deep in the things.

Seriously, if you're going to be spending \$500+ on a motherboard, do you really need PATA disks and floppy drives? Now, those of you still using XP might argue that floppy support is needed to add drivers during the install process, but an XP SP2/SP3 CD (either original or one slipstreamed together) supports loading from a USB drive as long as it's mapped to A:\.

Then there are those LPT and COM ports. Again, who needs these in 2012? OK, I'll accept that perhaps a small number of people are still making use of such devices, but again, the vast majority of those buying a new motherboard won't.

And while I'm in a ranting mood, why do notebooks, in particular high-end notebooks, still come with a built-in modem?

Excuse me while I go scream into a pillow ARRRRRGGGGGGHHH-HHHHHHH!

The reason why manufacturers do this is to give the impression of offering value, but so much of this legacy support is now valueless and pointless, so much so that it's laughable. It also makes for bad design. For example, in cramming unnecessary stuff onto a motherboard, placement of stuff that you actually want to use, like SATA and USB headers, are seriously compromised.

Steve Sutters

Passwords and Security

Last week I found myself in the uncomfortable position of realising that my Google mail account had been accessed by someone in Estonia! Not only did this mean they were able to read all the emails I had sent, but they had sent out emails as if they were from me, they had access to all my contacts' email addresses, and also to any documents I had stored at Google Docs. I immediately changed my password and put some other security measures in place (see bottom of article).

As if that wasn't bad enough there was another problem. Because I had a "hard to guess" password, 8 characters long, a mixture of upper and lower case letters, numbers, and one punctuation mark, and because I do not like to write passwords down, I had got into the habit of using the same password on multiple sites. Not only that, but because on many sites the username they like you to use is your email address, then it was obvious that if someone had access to my Google mail account, then potentially they could access all the other sites where I use the same password! So I then had to go Facebook, Amazon, Ebay and all those other sites and change those passwords too.

This has taught me a valuable lesson. Never, never use the same combination of username and password on multiple sites. Therefore I urge you, if you have used the same combination on multiple sites, then go now and change your passwords to unique ones.

From reading the paragraphs above it should be obvious that one reason for using different passwords is that if someone gains access to one password then they can only access one web site. What, with hindsight is equally obvious, though was not at the time, is that by using the same password on multiple sites you are greatly increasing the likelihood of a valuable password being obtained by a third party. When I found my email account had been hacked my first thought was that I might have a virus on my computer, but a deep scan using two different anti-virus packages taking 48 hours found nothing. Reading this you might think the next obvious problem was with Google itself, and that somehow security there had been compromised, this is possible, but I think unlikely. However what about some of the smaller lesser known web sites I had used, possibly on shared web hosting and coded by who knows who? What is their security like? By using the same password and username combination across

multiple sites I had greatly increased the chances of the password being compromised.

The problem now is that instead of one password which I could remember, I now have multiple passwords, one for each website. How do I remember these? Well obviously I can't, so at the moment I have them stored in a text document, and this text document is password protected. I also have a paper copy printed off and put in my desk. This is poor security, but I have made a judgement that the likelihood of someone seeing this paper document is far less than the likelihood of one password which I share being cracked.

There are dedicated programs which will store passwords for you, and I shall probably investigate these in due course. However one problem is that ideally I will require one which works on XP, Windows 7, and Linux. The second, and to some extent more serious problem, is that I require one which is secure. How do I know that the passwords I store in the program are not secretly being transmitted to some evil organisation? Or am I just being paranoid? An alternative option would be to use TrueCrypt to encrypt the file, and keep this on a USB key

Google Security Measures

I mentioned earlier that I had put some extra security measures in place on my Google account, so I thought it might be worth detailing what I had done, and also what other things I have noted about Google's security since.

When logged into a Google mail account, at the bottom right of the web browser there as a line giving a link to the details of all recent logins on that account. It was from here that I could identify that I had been hacked from Estonia. There was also a button on this page which allowed me to log out all other users on my account, so I could log out the Estonian!

Google has a nice feature which can be enabled called "2-step verification". Having enabled this, when I (or a hacker) logs in to my Google account from a computer which has not previously been used to log in to Google, Google will send a text message to my mobile phone. This message contains a six digit code, and that code needs to be entered into the Google web site along with the password to gain access to my account. So now even if a hacker has my password, they will also need my mobile phone, or else they cant log in to Google.

Lastly, having changed my password, when I tried to access Google's web site using my old password it didn't simply say this is the wrong user name and password, try again. Google put up a message informing me that my password had been changed 5 days ago. If it had not been me that changed the password, but a hacker, this warning would have given me notice that something had happened.

David Groom

Joining the Email Group

Send an e-mail to: **iwpcusers-subscribe@yahoogroups.com** with "join" in the subject line.

All members are encouraged to join this group (which costs nothing and is private to club members) in order to keep in touch with events and to join in with the discussions.

You can also keep in touch by regularly visiting www.iwpcug.org

Cover Disk

I couldn't find enough new free programs to warrant a cover disk this month. One will be produced for the next issue.

David Groom

Car Sharing / Lifts

It is possible that a number of our members do not attend our monthly meetings because they find transport to Newport difficult and the committee have wondered if it might be possible to arrange lifts for those members. With a membership as large as ours it is not always obvious who might like to attend but has difficulty with transport, and secondly, who might live nearby and be able to offer them a lift.

As a first step, if you would like to attend the meetings, currently can't get to the Riverside Centre on a Wednesday evening and would like to see if there is a nearby member who might offer you a lift, then could you please get in contact with me. We will then try and find a member who might be willing to give you a lift.

Quo Vadis IWPCUG?

Clubs are usually a joint venture to further the needs of the participants. So it has been with the IWPCUG, but one wonders whether the club is now serving the dreams of the committee alone. HotKey is short of articles, the Cover Disc tends to comprise useful updates and otherwise inaccessible downloads, but could arguably be replaced by a set of URL links (as PC Plus has recently done with theirs), and the speaker programme is driven by ad hoc inspiration and serendipity rather than satisfying queued needs.

The discussion at the recent AGM surrounded cost saving measures by migrating the HotKey magazine and cover disk to e-format. An unfortunate, but only slightly flippant suggestion, that if the talks were pre-recorded and streamed then this would further aid this objective, had a mixed reception (but this is almost exactly the CNET Community Help newsletter format).

Those who favour the traditional case for hard copy, shiny cover disks and real speaker meetings stress the advantages of something physical and real to possess and welcome the physical jostling presence of real people, conversation and verbal interchange of ideas.

A virtual club would never have occurred to anyone when the club was founded, but increasingly newsletters elsewhere are offered in PDF format on demand, cover disks are starting to disappear from magazines (PC Plus) and YouTube gains zigabytes of content every day. Meanwhile clubs and societies get thinner on the ground as we all stay home and cluster round our ever enlarging computer screens.

Should we bow to the inevitable? Would our talks be more convenient if they were pre-recorded and uploaded to YouTube? Would we bother watching them? Or reading HotKey? Or seeing what treasures our latest cover disk hold? Would we jostle each other and exchange seminal ideas over Riverside coffee if we all stayed home? It would certainly solve our own budget crisis!

Roger Skidmore

There Is Such Thing as a Free Lunch

Free has a long and illustrious history in computing, and it's still alive and well today. You can't obtain free PCs, supported by advertising, as you could in the late 1990s. More web sites today cost to access in part, or in whole, than in the past. But there's still plenty of free software available.

Some free software is supported by advertising. Some is available only on a timelimited trial basis in hope that you'll buy. Some provide features that are unavailable until you buy. Some is available for free with the request that you make a donation to the programmer if you like it. But some is totally free, without any expectation of payment.

Some totally free offerings are small programs made available by programmers because they enjoy programming and enjoy having others benefit from their work. Other totally free offerings are large programs brimming with features made available by companies or groups of individuals who dislike the monopoly pricing enjoyed by some software companies.

Much free software is available as a download through the Internet, after which you install the program onto your own hard drive. Other free software is available for use only while connected to the Internet or, to use the current jargon, "on the cloud."

Here's a sample of the best known, and best, of the free software offerings today:

- * LibreOffice (www.libreoffice.org). This is the best of the free Microsoft Office alternatives. It's a descendent of OpenOffice, which Microsoft arch-rival Sun Microsystems first promoted in the early 2000s. LibreOffice is made available by the Document Foundation, a nonprofit organization. Available in versions for Microsoft Windows, Mac OS X, and Linux, LibreOffice consists of a range of Microsoft Office-compatible productivity programs, including a word processor, spreadsheet program, presentation program, database management program, drawing program, and math formula program.
- * Google Docs (docs.google.com). This is the leading free cloud office suite, made available from the web search giant Google. Working within your web browser, whether it's Google's own free Chrome browser or others, you can access a word processor, spreadsheet program, presentation program, drawing program, and forms program while connected to the Internet. Google Docs is best for those who travel frequently or otherwise need to work from multiple locations. It's also a good way for multiple people to collaborate on the same documents. It can save to Microsoft Office-compatible formats, but it's not as compatible with Office as LibreOffice.

* Ubuntu (www.ubuntu.com). This is the easiest-to-use free distribution, or "distro," of Linux (www.linux.org), which is an alternative to Microsoft Windows or other operating systems. Linux has millions of fans, which are typically more technically proficient computer users because it's more difficult to install and learn than Windows, though users report that it's less prone to software conflicts and virus and other malware attacks.

Another enhanced version of Linux is Linux Mint (<u>www.linuxmint.com</u>). It's built upon Ubuntu but is more customizable.

- * Better Explorer (bexplorer.codeplex.com). If you're sticking with Windows, and most people do, Better Explorer as its name implies is an improved version of Windows Explorer, the tool included with Windows that helps you organize the files on your hard drive. An offering from CodePlex, a community of software developers supported by Microsoft who are working on free "open source" programs, Better Explorer among other things provides tabs with which you can work with multiple folders at once.
- * Pixlr Editor (www.pixlr.com). This cloud-based program, which you use within your browser window while connected to the Internet, provides many of the same photo editing features as the power-packed Adobe Photoshop. Among other things, you can resize and rotate photos; adjust their brightness, contrast, and color balance; sharpen or blur photos; and add an assortment of special effects from posterization to vignetting.

If you have a slow Internet connection or otherwise want to edit photos while not connected to the Internet, GIMP, or GNU Image Manipulation Program (www.gimp.org), provides plenty of features but isn't as easy to use.

- * Songbird (www.getsongbird.org). This free music organizer looks and works a lot like Apple's iTunes but for Android devices as well as desktop browsers. Another option is Google Music (music.google.com), which makes it easy to store and stream lots of songs over the Internet.
- * SlimCleaner (www.slimcleaner.com). This free utility program provides tools ranging from cleaning unnecessary files off your computer and optimizing the storage of those you keep to permanently shredding sensitive financial and other files no longer needed to prevent anyone else from accessing them.

Reid Goldsborough www.reidgoldsborough.com.

[Note: the comment concerning Linux being more difficult, is not one that I believe is now justified - David Groom]



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